ENGINEERING AND RELATED SERVICES
MARCH 20, 2013

State Project No. H.004957 (Lead No.)
F.A.P. No. H004957
I-12 to Bush
LA 3241 (I-12 – LA 36)
St. Tammany Parish

State Project No. H.004435
F.A.P. No. H004435
I-12 to Bush
LA 3241 (LA 36 – LA 435)
St. Tammany Parish

State Project No. H.004113
F.A.P. No. H004113
I-12 to Bush
LA 3241 (LA 435 – LA 40/LA 41)
St. Tammany Parish

****DBE/WBE GOAL = 5%****

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on DOTD Form 24-102 (24-102), "Professional Engineering and Related Services", revised November 2011, from Consulting Firms (Consultant) to provide engineering and related services. **All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met at the time of submittal.**

Only one (1) SF 24-102 submittal is required for this Advertisement, and it represents the Prime-Consultant/Sub-Consultant(s) Team's qualifications and submittal for each of the three (3) referenced projects. All three identifying H-numbers must be listed on your 24-102 submittals cover page.

Note that only one (1) Prime-Consultant/Sub-Consultant(s) Team will be selected for each of these three projects. *No* Team will be selected for more than one of these project segments.

Three (3) separate Prime-Consultant/Sub-Consultant(s) Teams will be selected (one for each project). The Secretary will be presented a shortlist of the five highest ranked teams.

Project Manager – Mr. Jeff Burst, P.E.

All inquiries concerning this advertisement should be sent in writing to Alan.Dale@LA.gov.

PROJECT DESCRIPTION

The selected Consultants will provide engineering and related services to provide a four lane arterial highway facility.

The I-12 to Bush project is part of the TIMED Program connecting LA 3241 from the LA 40/LA 41 intersection in Bush, LA to I-12 at the LA 434 Interchange. A Record of Decision (ROD) from the US Army Corps of Engineers was granted selecting Alternate Q as the preferred alignment of the new LA 3241.

Alternate Q is further described as follows: The alignment ties into I-12 at the existing I-12/LA 434 Interchange (Exit 74) and proceeds northerly along LA 434 for approximately 2.5 miles then leaves the existing highway and proceeds on new alignment until it connects with an abandoned railroad corridor approximately 1.7 miles north of LA 36. Alternate Q then follows the abandoned railroad alignment north and ties into the intersection of LA 40 and LA 41 (see attachment).

The corridor is broken out into three (3) distinct project segments:

- I-12 to LA 36
- LA 36 – LA 435
- LA 435 – LA 40/LA 41

SCOPE OF SERVICES

The scope of services for these Contracts will be to provide all pre-construction services, including Survey, Preliminary Roadway and Bridge design plans, Geotechnical investigation, and SUE services.

The services to be rendered for this Project shall consist of the following Stages and Parts:

A. Stage 3: Design
   Part I: Surveying Services
      (a) Topographic Survey

   Part III: 100% Preliminary Plans (Roadway and Bridge)

B. Geotechnical Services
C. Subsurface Utility Engineering (SUE)

I. SURVEY SERVICES

a. I-12 to LA 36

A complete Topographic survey including all utilities with depths and all drainage is required for this portion of the overall corridor outlined in the Project Description. Along with Finish floor elevations of all buildings that fall in the survey limits. This project shall be completed in accordance with the Location and Survey Manual and all current accepted Location and Survey Automation procedures.

The survey will begin at the northern most expansion joint of the LA Highway 434 overpass bridge over I-12. (Structure Number: 8521202691) From this Point the survey will proceed in a northerly direction along LA Highway 434 for approximately 12,825 feet to a point where the proposed alignment leaves the existing alignment of LA Highway 434. The width of the Survey and DTM in this segment will be 150 feet East and West of the existing alignment of LA Highway 434. (See attached sketch). From this point along LA Highway 434 (mentioned above) the survey will continue in two directions. First, the survey will continue in a northerly direction following the alignment of LA Highway 434 for approximately 4,800 feet to a point that is 500 feet north of Horseshoe Island Road. The width of the Survey and DTM will vary in this segment, but will be 150 feet East and West of the existing alignment of LA Highway 434 at a minimum. Second,(from the point mentioned above) the survey will continue in an northeasterly direction leaving the alignment of LA Highway 434 for approximately 21,500 feet to a point 500 feet north of the intersection of LA Highway 36 and this proposed route. This portion of the survey will cross several parish roads including Firetower Road and Horseshoe Island Road. The width of the Survey and DTM will be 150 feet East and West of the proposed alignment (See attached sketch).

This survey will also include the on and exit ramps for the west bound lanes of I-12 at the LA Highway 434 interchange. The length of this survey will be approximately 2,500 feet East and West along each ramp. The width of the Survey and DTM along the ramps will be 75 feet North and South of the existing alignment of these ramps. (See attached sketch)

b. LA 36 – LA 435

A Topographic Survey will be required along this portion of this proposed corridor. A complete Topographic survey including all utilities with depths and all drainage is required. Along with Finish floor elevations of all buildings that fall in the survey limits. This project shall be completed in accordance with the Location and Survey Manual and all current accepted Location and Survey Automation procedures.

The survey will begin a point 500 feet north of the intersection of LA Highway 36 and this proposed route. From the point 500 feet north of the intersection of LA Highway 36 the survey will continue in a northerly direction for approximately 43,000 feet to a point 500 feet north of the intersection of LA Highway 435 and this new proposed route (LA 3241). This portion of the survey will cross several parish roads. Also a portion of this segment's alignment will follow an abandoned railroad

dummy line. The width of the Survey and DTM will be 150 feet East and West of the proposed alignment (See attached sketch).

c. LA 435 – LA 40/LA41

A Topographic Survey will be required along this portion of this proposed corridor. A complete Topographic survey including all utilities with depths and all drainage is required. Along with Finish floor elevations of all buildings that fall in the survey limits. This project shall be completed in accordance with the Location and Survey Manual and all current accepted Location and Survey Automation procedures.

The survey will begin a point 500 feet north of the intersection of La Highway 435 and this proposed route. From the point 500 feet north of the intersection of La Highway 435 (mentioned above) the survey will continue in an northerly direction for approximately 29,500 feet to a point 500 feet north of the intersection of La Highway 40 and La Highway 41. This portion of the survey will cross several parish roads. Also a portion of the alignment will follow an abandoned railroad dummy line. The width of the Survey and DTM will be 150 feet East and West of the proposed alignment (See attached sketch).

**** General Survey Services Scope (Applies to all Segments)**

Also included is an attached line and grade study titled "I-12 TO BUSH" (sketch) for the purpose to assist in defining these limits. (Labeled: *Alternative Q*).

An existing drainage map will be required. Please refer to the Location and Survey Manual for detailed instructions of what is required for the drainage map.

Permission of land owners shall be acquired by the consultant before entering any property associated with this description.

The project alignments shall be established using the existing centerline of roads.

Survey consultants for each of the project segments shall coordinate with one another on location of starting and ending points with adjacent segments. This shall be applied to Field topographic survey and Drainage map for each segment.

Any side or major intersecting roads that the above description intersects shall also be included with the survey limits. (Refer to the attached survey request forms)

II. GEOTECHNICAL SERVICES

a. I-12 to LA 36

The selected firm will perform geotechnical exploration services for the above captioned project, consisting of thirty-six (36) deep soil borings, six (6) culvert borings, fifty-six (56) shallow roadway borings, sampling, and laboratory testing along the project alignment in St. Tammany Parish. The project alignment includes one bridge: over Firetower Road. The exact number of soil borings may change as survey data and preliminary engineering are finalized. The following table indicates the number of borings estimated for each bridge.

Bridge	Type of Crossing	Number of Deep Borings
Firetower Road	Overpass	36

The shallow borings will be made in the median spaced at approximately 500-ft intervals. The culvert borings are anticipated to be 50 feet deep.

b. LA 36 – LA 435

The selected firm will perform geotechnical exploration services for the above captioned project, consisting of thirty-two (32) deep soil borings, ten (10) culvert borings, eighty-eight (88) shallow roadway borings, sampling, and laboratory testing along the project alignment in St. Tammany Parish. The project alignment includes two bridges: LA 435 over Bayou Lacombe Tributary and LA 36 over Bayou Lacombe Tributary 2. The exact number of soil borings may change as survey data and preliminary engineering are finalized. The following table indicates the number of borings estimated for each bridge.

Bridge	Type of Crossing	Number of Deep Borings
Bayou Lacombe Bridge 1	Waterway	10
Bayou Lacombe Bridge 2	Waterway	22

The shallow borings will be made in the median spaced at approximately 500-ft intervals. The culvert borings are anticipated to be 50 feet deep.

c. LA 435 – LA 40/LA 41

The selected firm will perform geotechnical exploration services for the above captioned project, consisting of eighteen (18) deep soil borings, eight (8) culvert borings, fifty-eight (58) shallow roadway borings, sampling, and laboratory testing along the project alignment in St. Tammany Parish. The project alignment includes one bridge: LA 435 over Talisheek Creek. The exact number of soil borings may change as survey data and preliminary engineering are finalized. The following table indicates the number of borings estimated for each bridge.

Bridge	Type of Crossing	Number of Deep Borings
Talisheek Creek	Creek	18

The shallow borings will be made in the median spaced at approximately 500-ft intervals. The culvert borings are anticipated to be 50 feet deep.

**** General Geotechnical Services Scope (Applies to all Segments)**

The soils investigations, sampling and testing services to be provided shall include, but are not limited to:

Geotechnical Exploration and Investigations

The geotechnical investigations, sampling, and testing services to be provided shall include, but are not limited to:

- Field Reconnaissance (including rights of entry, utility locations, access, etc.);
- Mobilization/demobilization;
- Deep and Shallow Soil borings;
- CPT soundings (ASTM D5778);
- Water table elevations with duration of reading;
- GPS Latitude and Longitude of borings to within 10 ft (3 m) accuracy;
- Sealing boreholes in accordance to LA Water Well and DEQ Regulations;
- Standard Penetration Tests and Split-Barrel Sampling of Soils (AASHTO T 206);
- Unconfined Compressive Strength of Cohesive Soils (AASHTO T 208);
- Specific Gravity of Soils (AASHTO T 100);
- Laboratory Determination of Moisture Content of Soils (AASHTO T 265);
- Triaxial Compression Tests, Unconsolidated, Undrained (AASHTO T 296);
- Triaxial Compression Tests, Consolidated Drained 3-point (AASHTO T 297);
- Atterberg Limits (DOTD TR 428);
- Consolidation Tests with Rebound (AASHTO T 216);
- Organic Content (DOTD TR 413);
- Classification of Soils;
- Deep borings (ASTM D 2487 (USCS method));
- Shallow borings (ASTM D 3282(AASHTO method));
- Drafting of boring logs;
- Drafting of subgrade soil surveys; and
- Traffic Control.

Drilling and Sampling

The deep soil borings shall be made by the wet rotary drilling method. In each deep boring, undisturbed samples of cohesive or semi-cohesive material shall be obtained from each distinct soil stratum that is penetrated or 5 ft (1.5 m) interval, whichever is less, using a 3 in. (76 mm) diameter Shelby tube sampling barrel as per AASHTO D 207. When cohesionless soils are encountered at any depth, a split spoon sampler shall be used in conjunction with Standard Penetration Tests (SPT) at 3 foot (1 m) intervals. In the

case of massive dense sands being encountered, the Project Manager may be contacted in order to relax the sampling interval, on a case-by-case basis. If requested by DOTD, continuous sampling of a boring will be obtained at 3 foot (1 m) intervals to a pre-determined depth. Boring samples shall be retained for a minimum period of 90 days.

Boring logs which show evidence of SPT's in cohesive soils or tube samples in cohesionless soils will not be accepted.

Shallow soil borings for subgrade soil surveys can be made utilizing either hollow-stem or continuous-flight augers. Any other method shall be approved by the DOTD Pavement & Geotechnical Services Administrator prior to it being implemented.

Transport of samples from the field to the laboratory shall conform to ASTM D4220, Group C. Samples may not be extruded at the worksite. Sample tubes shall be transported vertically in the same orientation as they were sampled, with care taken to avoid excessive temperature variation, vibration, or any other sample disturbance. They shall be extruded in the laboratory in accordance by means of a continuous pressure hydraulic ram. Extrusion by any other method, such as water pressure, is prohibited. Samples shall be extruded directly onto a sample trough, and shall not be caught with the hands.

Laboratory Testing

Soil mechanics laboratory testing shall be performed on at least 75 percent of all samples obtained from the borings. UU Triaxial compression and Atterberg limit testing shall be performed on at least 75 percent of the extruded cohesive samples.

If designated as required for the boring, consolidation tests shall be performed according to AASHTO T 216, and results shall be reported as graphs of "Void Ratio vs. Log of Pressure" and "Coefficient of Consolidation vs. Log of Pressure." Both plots may be shown on the same graph, if adequately labeled. Any sample from a clay layer that shows signs of being over consolidated must be subjected to a load/rebound/re-load cycle during the consolidation testing, as per AASHTO T 216. Any sample selected for consolidation testing shall also have the specific gravity determined according to AASHTO T 100, and the Atterberg Limits determined according to DOTD TR 428, and with supporting results reported. Laboratory classification of soils from deep borings shall be in accordance with ASTM D 2487. All other sampling and testing shall be performed in accordance with current AASHTO test procedures, unless otherwise noted.

Cone Penetrometer Testing

The CPT rigs shall be capable of providing up to 20 tons reaction. Pore pressure measurements, when requested by the Project Manager, shall be obtained using U2 location, unless otherwise specified. Dissipation tests shall be performed until at least 50 percent of the excess pore water pressure has been dissipated. All CPT probes and equipment utilized shall have been calibrated within the previous year or within a period specified by the project manager. The cost of performing the calibration shall be the

consultant's responsibility. The final CPT sounding results shall conform to the input format of LTRC's CPT-Pile software.

Other Considerations

The natural ground in elevation at the location of each borehole shall be determined to within 6 in. (0.15 m). These elevations maybe determined utilizing elevations of existing structures for landmarks that may be shown on the plans supplied. If DOTD has established a temporary benchmark (TBM) at the site, it shall be used in lieu of elevations shown on the plans.

Unless otherwise stated, it will be the responsibility of the Consultant to obtain consent from the respective landowners in order to enter onto private property. The process for contacting landowners and documentation for Consultant Entry will be discussed at the Consultant Kickoff meeting with DOTD personnel. In the case that consent is not granted, the Consultant shall contact the project manager to execute a Forced Entry, as per Louisiana Revised Statute 48:217. Forced entry access will be granted via written notice from the project manager.

Deliverables

Unless specified by the Project Manager, it will be the responsibility of the Consultant to obtain 3 or 4 mil polyester double matte film for use in reporting the geotechnical exploration results. The DOTD Pavement & Geotechnical Services Section will provide one sheet to the Consultant for use as an example of each format. The lettering used on the profiles shall be of such size and clarity that the legibility of data can be maintained when reduced to fifty (50) percent of its original size. Soil profiles shall be grouped on the plan sheets according to the Construction Project Number(s). In addition to the paper submittal, electronic logs that can be imported into the gINT software for the electronic storage of the soil boring and CPT logs shall be submitted. All project deliverables shall become the property of DOTD upon successful completion of the above captioned project.

All reported test results, including each profile sheet, shall be sealed and manually signed and dated by the Professional Engineer in responsible charge of testing. The DOTD Pavement and Geotechnical Services Section will review the completed boring logs for completeness and accuracy prior to their final submittal.

Geotechnical Engineering Analysis and Design

All geotechnical engineering will be performed in accordance with present design requirements and standard engineering practice. These services are to include but are not limited to:

- Slope stability (embankment & excavation);
- Embankment settlement;
- Bridge foundations;
- Piles;
- Drilled shafts;

- Other foundations;
- Pile-supported approach slab design data;
- Bridge foundation static and dynamic load test program;
- Earth retaining structures; and
- Geotechnical analysis & design recommendations report.

Please refer to **Attachment "A"** located at the end of this document for specific details for the above engineering services.

III. BRIDGE DESIGN SERVICES

The bridge design scope of work will include all engineering services as necessary to complete the submittal of Stage 3 Design, Part III Preliminary Plans. **Note that these services apply to all three (3) project segments.**

a) Bridge Design Tasks:

Task 1: Prepare design criteria in accordance with the latest versions of the reference documents and any other relevant documents.

Task 2: Review all relevant project documents including, but not limited to, the environmental study, traffic data, parish maps, aerial photos, and DOTD roadway classification.

Task 3: Conduct a field visit to the bridge site(s) and assess the existing conditions for possible permit issues, roadway alignment alternatives, etc. Determine if any additional bridges***** beyond those shown in the provided "Alternate Q" plan and profile sheets, are required.

*****A supplemental agreement will be developed for any such bridges.

Task 4: Develop a list of required bridges and provide estimated types, sizes (lengths and widths), and locations. Develop alternates for structure types if appropriate. Prepare construction cost estimates (itemizing construction, right-of-way, and utility relocation costs) for each bridge and each alternate.

Task 5: Submit the aforementioned items to DOTD for review and comment. The preferred option for each alternate should be included and supported as applicable.

Task 6: Prepare a set of preliminary bridge plans and construction cost estimate for the preferred option(s). Required drawings for preliminary plans shall include, as applicable, General Bridge Notes and Bridge Index, Summary of Estimated Bridge Quantities, General Bridge Plans, Typical Bridge Sections, Super-elevation Diagrams, Construction Phasing Details, Traffic Control Details, Foundation Layouts, Pile Loads / Details, and any other sheets that may be necessary to clearly set forth and illustrate the parameters for the final bridge design.

b) Deliverables:

The deliverables for the bridge design work shall include the following as appropriate. Both hardcopy and electronic submittals (word, pdf, dgn formats) shall be made.

- Design Criteria
- Summary of the analysis results from Tasks 2 and 3
- Summary of all bridges and their associated costs for all alternatives; this shall include types, sizes, and locations as well as corresponding explanations of the design obstacles and constructability of each
- Recommendation on the preferred alternative
- Set of preliminary bridge plans (30%, 60%, 90% and 100% submittals required; submittal schedule to be as determined and agreed upon by DOTD and the consultant)
- Appendix of all relevant data gathered and created during the execution of the work.

In addition to any intermediate submittal requirements, all deliverables, excluding the plan sheets, shall be complied and submitted in a report format with the 100% preliminary bridge plan submittal.

IV. ROAD DESIGN SERVICES

a. I-12 to LA 36

The project consists of providing a four-lane, divided roadway beginning at the I-12/LA 434 interchange and ending at LA 36. The project will be approximately 6 miles in length. The first 2.5 miles of the project will be along the existing alignment of LA 434, widening the roadway from two lanes to four lanes. The last 3.5 miles will be four lanes on a new alignment. SA-1 and RA-3 design guidelines will apply. Additional right-of-way will be required for the length of the project segment.

b. LA 36 – LA 435

The project consists of providing a four-lane, divided roadway beginning 500' north of the intersection of the proposed LA 3241 alignment and LA 36. The project will be approximately 8.1 miles in length. The entire section will be on new alignment. RA-3 design guidelines will apply. Additional right-of-way will be required for the length of the project segment.

c. LA 435 – LA 40/LA 41

The project consists of providing a four-lane, divided roadway beginning 500' north of the intersection of the proposed LA 3241 alignment and LA 435 and ends

approximately 500' north of the LA 40/LA 41 intersection. The project will be approximately 5.5 miles in length on new alignment. RA-2 and RA-3 design guidelines will apply. A portion of the project will require control of access. Additional Right-of-Way will be required for the length of the project segment.

The roadway scope of work will include all engineering services necessary to complete the submittal of Stage 3 Design, Part III Preliminary Plans. **Note that these services apply to all three (3) project segments.**

- Part III: 100% Preliminary Roadway Plans – The consultant shall provide roadway plans including, but not limited to, the following:
  - Title Sheet
  - Typical Sections and Details
  - Summary Sheets
  - 1" = 50' Plan and Profile Sheets (containing horizontal and vertical alignment)
  - Geometric Details
  - Existing Drainage Map
  - Design Drainage Map
  - Sequence of Construction and Construction Signing
  - Cross Sections
  - Construction Cost Estimate

<u>Note</u>: Electronic files will be in MicroStation and Inroads formats and certified by CADconform.

V. <u>SUBSURFACE UTILITY ENGINEERING (SUE) SERVICES:</u>

Note that these services apply to all three (3) project segments. A branch of engineering practice that involves managing certain risks associated with utility mapping at appropriate quality levels, utility coordination, utility relocation design and coordination, utility condition assessment, communication of utility data to concerned parties, utility relocation cost estimates, implementation of utility accommodation policies, and utility design.

The scope for these projects includes Subsurface Utility Engineering (SUE) services for obtaining Utility Quality Level B services throughout the project limits of each project segment and Utility Quality Level A services at any pipeline crossings and at the tie-in of the existing the interchange location (I-12 & LA 434) if necessary.

The required services also includes Utility Coordination to confirm that the Road and Bridge Design and the Utility Relocation efforts are conducted in accordance to the Department's standards, policies, procedures, and design criteria. The Utility Coordinator shall be responsible for assisting the Engineer of Record in identifying all existing utilities and coordinating any new installations, scheduling utility meetings, keeping and distribution of minutes of all utility meetings, and ensuring expedient follow-up on all

unresolved issues, distributing all plans, conflict matrixes, and changes to affected utility owners and making sure this information is properly coordinated. The Utility Coordinator will review all proposed utility work to identify any potential conflicts during design, and will assist and recommend design alternatives to minimize utility impacts. As required, any utility relocation design is also included in this scope.

Utility Quality Level A: Indicates the precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point.

Utility Quality Level B: Using the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Such positions shall be reproducible by surface geophysics at any point of their depiction and shall be collected in the same areas defined for the topographical surveys. This is accomplished by using professional judgment in correlating such information with the previously obtained Quality Level C information.

Utility Quality Level C: Indicates information obtained by flagging underground utilities and plotting visible above-ground utility features for the Survey Team to include and reference into the DTM. This is accomplished by using professional judgment in correlating such information with the previously obtained Quality Level D information.

Utility Quality Level D: Indicates utility information derived from existing records and oral recollections.

ELECTRONIC DELIVERABLES

The Consultant hereby agrees to produce electronic deliverables in conformance with the DOTD Software and Deliverable Standards for Electronic Plans document. The Consultant is also responsible for ensuring that Sub-Consultants submit their electronic deliverables in conformance with the same standards. The DOTD Software and Deliverable Standards for Electronic Plans document and DOTD CAD Standards Downloads are available via links on the DOTD web site.

The Consultant shall apply patches to CAD Standard Resources and install incremental updates of software as needed or required. The Consultant hereby agrees to install major updates to software versions and CAD Standard Resources in a timely manner. Major updates of CAD standards and software versions shall be applied per directive or approval of the DOTD Design Automation Manager. Such updates will not have a significant impact on the plan development time or project delivery date, nor will they require the Consultant to purchase additional software. Prior to proceeding with plan development, the Consultant shall contact the Project Manager for any special instructions regarding project-specific requirements.

In the event that any electronic standard conflicts with written documentation, including DOTD plan-development Manuals, the electronic standard typically governs. The Consultant is responsible for contacting the Project Manager should questions arise.

The Consultant shall upload (or check in) electronic deliverables directly into the DOTD ProjectWise repository at each plan delivery milestone. Consultants are responsible for performing certain operations at each milestone including, but not limited to, the following:

- Upload (or check in) CAD plan deliverables to the discipline "Plans" folder
- Apply and maintain indexing attributes to CAD plans (and other deliverables as needed)
- Publish PDF format plan submittals in ProjectWise using automated publishing tools
- Digitally sign PDF format plan submittals in ProjectWise according to DOTD standards and procedures (Final Plans, Revisions and Change Orders). Signatures shall be applied in signature blocks provided with electronic seals and Title Sheets.

Additionally, after reviewing deliverables for each submittal milestone, the Project Manager shall notify the Consultant regarding the availability of two automatically-generated informational reports in ProjectWise. These reports document the completion status and other information regarding indexing attributes and CAD standards. Consultants shall take these reports into account and make any necessary adjustments to plans before the next submittal milestone; or sooner, if directed by the Project Manager.

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program or adopt DOTD's program; in order to provide a mechanism by which all construction plans can be subject to a systematic and consistent review. Consultant's must ensure quality and adhere to established design policies, procedures, standards and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant. The Consultant's plans shall meet or exceed DOTD's Construction Plans Quality Control / Quality Assurance Manual and EDSM No. Volume I. 1.1.24 on Plan Quality. The Consultant shall transmit plans with a DOTD Quality Control/Quality Assurance Checklist, Documentation Manual for Project Delivery, and a certification that the plans meet the DOTD's quality standards.

QUAILTY CONTROL/QUALITY ASSURANCE

The Prime Consultant shall submit a QC/QA plan document specifically developed for this project as part of SF 24-102. The QC/QA plan document must comply with the minimum requirements set in the "Guidance on QC/QA in Bridge Design in Response to NTSB Recommendation (H-08-17)" (FHWA/AASHTO Guidance), which was published by FHWA and AASHTO in August 2011, and LADOTD Bridge Design Section QC/QA policies. The FHWA/AASHTO guidance and LADOTD Bridge Design Section QC/QA policies can be downloaded from LADOTD Bridge Design Section website. The QC/QA plan document must be implemented for all bridge design activities in both design phase

and construction support phase of the project. The Prime Consultant is fully responsible for QC/QA of their work as well as the work of all sub-consultants. All project submittals must include a QC/QA certification that the submittals meet the requirements of the QC/QA plan document.

SERVICES TO BE PERFORMED BY DOTD

In addition to any services previously indicated to be performed by the DOTD, the following services and data shall also be provided, if available.

a. Pavement Design
b. Traffic Data
c. Access to Standard Plans and Special Details (if applicable)
d. Access to As-built plans (if available) – the consultant will be responsible for obtaining the As-built plans.

ADDITIONAL SERVICES

The scope of services, compensation and contract time for future engineering services may be established by Supplemental Agreement(s) for the following:

A. Part I: Surveying Services
   (a) Property Surveys
   (b) Base and Final R/W Maps
   (c) Title reports
   (d) Title updates

B. Stage3: Design
   Part IV: Final Roadway and Bridge Plans

C. Stage 5: Construction Engineering Service
   - Part I: Construction Support
   - Part II: Shop Drawings

D. Traffic Management Plan

All additional sub-consultants required to perform these services are subject to approval as per RS 48:290.D prior to execution of the supplemental agreement.

CONTRACT TIME

The Consultant will proceed with the services specified herein after the execution of this Contract and upon written Notice-To-Proceed from the DOTD. The contract time for each segment shall not exceed the following (does not include the DOTD review time).

1. I-12 to LA 36 **620 calendar days**
2. LA 36 – LA 435 **585 calendar days**
3. LA 435 – LA 40/LA 41 **545 calendar days**

COMPENSATION

Compensation to the Consultants for services rendered in connection with these Contracts will be non-negotiated lump sums in the following amounts:

- **H.004957 I-12/LA 434 Interchange to LA 36 ($ 1,515,261)**
  - Approximately consisting of Road 37%, Survey 30%, Geotech 26%, and Bridge 7%,
- **H.004435 LA 36 to LA 435 ($ 1,586,826)**
  - Approximately consisting of Road 31%, Survey 31%, Geotech 29%, and Bridge 9%
- **H.004113 LA 435 to LA 40/LA 41 ($ 1,049,459)**
  - Approximately consisting of Road 33%, Survey 32%, Geotech 28%, and Bridge 7%

Note: These amounts do not included SUE services. A negotiated billable rate with a maximum fee will be utilized for the SUE services portion of these contracts. This fee will be negotiated after each Contract award.

All ***Additional Services*** (Final Roadway and Bridge design, Property Surveys and R/W maps, as well as any possible future Construction support or TMP) may be established via Supplemental Agreement and will be a Negotiated Lump Sum. The total compensation for each of these project segments is currently estimated to be as follows (not including negotiated SUE fees and direct expenses):

- H.004957 I-12/LA 434 Interchange to LA 36 ($ 2,500,135)
- H.004435 LA 36 to LA 435 ($ 2,597,495)
- H.004113 LA 435 to LA 40/LA 41 ($ 1,803,270)

REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
2. DOTD Location and Survey Manual
3. DOTD Roadway Design Procedures and Details
4. DOTD Design Guidelines
5. DOTD Hydraulics Manual
6. DOTD Standard Specifications for Roads and Bridges
7. Manual of Uniform Traffic Control Devices
8. DOTD Traffic Signal Design Manual
9. National Environmental Policy Act (NEPA)
10. National Electric Safety Code (NESC)
11. National Electric Code (NFPA 70)
12. DOTD Environmental Impact Procedures (Vols. I-III)

13. A Policy on Geometric Design of Highways and Streets (AASHTO)
14. DOTD Construction Contract Administration Manual
15. DOTD Materials Sampling Manual
16. DOTD Bridge Design Manual
17. Consultant Contract Services Manual
18. Geotechnical Engineering Services Document
19. Bridge Inspectors Reference Manual/90
20. DOTD Stage 1 Planning/Environmental Manual of Standard Practice
21. Code of Federal Regulations 29 CFR 1926 (OSHA)

Follow link below for the individual reference links:

http://webmail.dotd.louisiana.gov/ContWEB.nsf/b88769326453bef886256fe00047183a/18fc2860512aba5886257a62006133b8?OpenDocument

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met by the Prime-Consultant at the time of submittal:

1. At least one Principal of the Prime-Consultant shall be a Professional Engineer registered in the State of Louisiana.
2. The Prime-Consultant must also employ on a full time basis or through the use of a Sub-Consultant, a minimum of two Professional Civil Engineers registered in the State of Louisiana, one with at least five (5) years of experience in the preparation of roadway design plans, and one with at least ten (10) years of experience in the preparation of bridge design plans, as well as a corresponding support staff.
3. In addition to the above requirements, the Prime Consultant must also employ on a full-time basis or through the use of a Sub-Consultant, a minimum of one Professional Civil Engineer registered in the State of Louisiana with five (5) years of Geotechnical experience.
4. In addition to the above requirements, the Prime Consultant must also employ on a full time basis or through the use of a Sub-Consultant, a minimum of one Professional Land Surveyor registered in the State of Louisiana, with at least five (5) years of experience in conducting topographic and property surveys, preparing right-of-way maps for the DOTD, as well as a corresponding support staff.
5. The Prime Consultant must employ on a full time basis or through use of a Sub-Consultant, a minimum of one Professional Civil Engineer registered in the State of Louisiana, with at least five (5) years of experience managing Subsurface Utility Engineering (SUE) services in support of roadway design on DOTD transportation projects and corresponding support staff.

Training Certifications/Certifications of Compliance must be submitted with and made part of the Consultants DOTD Form 24-102 for all Personnel Requirements listed herein.

EVALUATION CRITERIA

The general criteria to be used by DOTD (when applicable) in evaluating responses for the selection of a Consultant to perform these services are:

1. Consultant's firm experience on similar projects, weighting factor of 3;
2. Consultant's personnel experience on similar projects, weighting factor of 4;
3. Consultant's firm size as related to the estimated project cost, weighting factor of 3; *
4. Consultant's past performance on similar DOTD projects, weighting factor of 6; **
5. Consultant's current work load with DOTD, weighting factor of 5;
6. Location where the work will be performed, weighting factor of 4;

*** A** firm with a ratio of 5 or greater as per the Departments Firm Size Chart will receive a rating of 2.
****** The Road Design (RX) (50%), Bridge Design Combination (BZ) (20%), Survey (SV/LS) (15%) and Geotechnical Explorations (15%) performance ratings will be used for this project.

Complexity Level (**moderate**)

Consultants will be evaluated as indicated in Items 1- 6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. The rating will then be multiplied by the corresponding weighting factor. The firm's rating in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used the Prime Consultant must perform a minimum of 51% of the work for the overall project. Each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

Communication Protocol

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection. **Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.**

1. Alan Dale – Ex officio
2. Jeff Burst – Project Manager
3. Paul Vaught III
4. Trey Jesclard
5. Stanley Ard

6. Chris Nickel

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution of the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (24-102):

A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator;
B. Neither the Consultant, nor any other party on behalf of the Consultant, shall contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;
C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;
E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of $1,000,000. The Prime-Consultant may require the Sub-Consultant(s) to carry professional liability insurance. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant/Team will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant/Team will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant/Team will maintain an approved Project Cost System, and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant/Team will maintain accounting records for a minimum of five years after final contract payment.

DBE/WBE - The selected Consultant Team will have a DBE/WBE goal of 5% of the contract fee. DBE/WBE participation will be limited to the firms listed on the LA DOTD UCP DBE Directory which can be found at the following link: http://www8.dotd.la.gov/UCP/UCPSearch.aspx. The DOTD Project Manager shall review submitted invoices to determine if the DBE/WBE goals are being achieved. If the Consultant has failed to meet the goal and no good faith efforts have been made, the DOTD Project Manager shall notify the Compliance Section, and at that time the DBE/WBE portion of the Contract fee will be withheld from the Prime Consultant.

Any Consultant currently under contract with the DOTD and who failed to meet all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (**stamped "original"**) and **five** copies of the DOTD Form 24-102 must be submitted to DOTD. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual. Any Consultant/Team failing to submit any of the information required on the 24-102, or providing inaccurate information on the 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract, must also submit a 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's 24-102 must be firmly bound to the Consultant's 24-102. In Section 8, the Consultant's 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Name(s) of the Consultant/Team listed on the 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The DOTD Form 24-102 will be identified with **State Projects No. H.004957, H.004435 and H.004113,** and will be submitted **prior to 3:00 p.m. CST** on **Monday, April 8, 2013**, by hand delivery or mail, addressed to:

Department of Transportation and Development
Attn.: Mr. Alan Dale, P.E.
Consultant Contracts Services Administrator
1201 Capitol Access Road, **Room 405-T**
Baton Rouge, LA 70802-4438 or
Telephone: (225) 379-1401

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted, and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD, and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.